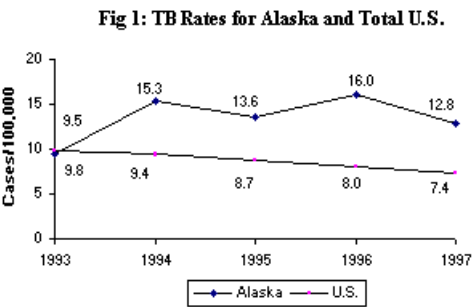
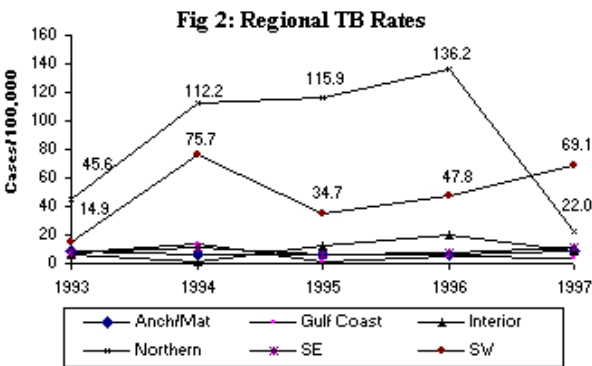


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Tuberculosis Trends in Alaska: 1993 through 1997

In 1997, 78 cases of tuberculosis (TB) were reported to the Division of Public Health, 19 fewer cases than in 1996. The TB incidence rate declined by 20% from 1996 to 1997, from 16.0 to 12.8 cases/100,000, as a result of successfully controlling multiple village outbreaks detected in 1994, 1995 and 1996. In spite of this good news, Alaska continued to have a higher incidence of TB than the U.S. (Figure 1).

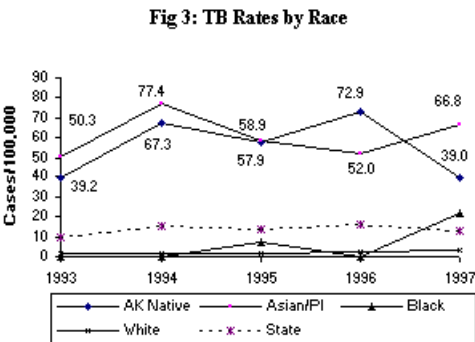


Regional rates: Over the past 5 years, TB was reported from all regions of the state; the burden of TB was greatest in the Northern and Southwestern regions. Of all TB, 24% occurred in the Northern region which has only 1.5% of the state's population. The decline in the rate of TB from 136.2 cases/100,000 in 1996 to 22.0 cases/100,000 in 1997 in the Northern region was because of successful village outbreak control (Figure 2). The Southwest region reported no village outbreaks in 1997, but continued to have increased TB activity.

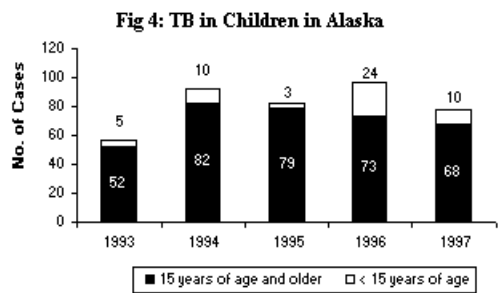


HIV testing: HIV testing is recommended for all persons with TB. In 1997, there was documentation that 40% of TB patients were offered HIV testing; two were HIV antibody positive. HIV testing was not offered to 18% of TB patients and, for 42% of patients, HIV testing status was unknown.

TB by race: In 1997 Alaska Natives and Asian/Pacific Islanders continued to have the highest rates of TB, 39.0 and 66.8 cases/100,000, respectively (Figure 3). Over the past 5 years, 67% of all TB occurred among Alaska Natives and 23% among Asian/Pacific Islanders. In 1997, six cases were reported among African-Americans, for a rate of 22 cases/100,000. The white population had a rate of 3.3 cases/100,000.



TB among children: In 1997, 13% (10 cases) of TB occurred in children under 15 years of age (Figure 4). Fourteen fewer children developed TB in 1997 than 1996, a direct result of village TB outbreak control. Unfortunately, several children developed primary TB after being exposed to infectious adult household members who were ill for a prolonged period before diagnosis.



Antimicrobial susceptibility: In 1997, 62 (80%) TB cases were culture-confirmed. Of the 62 isolates, 59 (95%) underwent susceptibility testing. One isolate was resistant to isoniazid, ethambutol, and streptomycin. Over the past 5 years, only 4% of isolates were resistant to one or more anti-tuberculosis agents; isoniazid resistance was seen in 3% of isolates. No isolates were resistant to both isoniazid and rifampin.

Foreign-born cases: Nineteen (24%) of the 78 cases reported in 1997 were foreign-born. This is the highest proportion of foreign-born TB ever documented in Alaska. Most (74%) immigrated to the U.S. within the past 5 years. The Philippines, Korea, Taiwan, Thailand, Vietnam, Peru and India were countries of origin for these cases.

Summary: In 1997, TB incidence declined in Alaska, although it remained higher than the total U.S. incidence. Most patients were not offered HIV testing, an important part of case management for TB. As village outbreaks were controlled, the incidence of TB declined most dramatically in the Northern region of the state. The proportion of foreign-born cases increased, which paralleled a national trend. Finally, antimicrobial drug resistance remained low over the past 5 years, less than 5% of tested isolates.

(Submitted by Beth Funk, MD, MPH, Alaska Tuberculosis Program)